AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) ~~A self-generating~~ An anaerobic medium composition for the selective growth of anaerobes from a sample that contains at least facultative microorganisms and anaerobes wherein said medium composition comprises a nutrient medium, a salt of an azide, wherein the azide is present in an amount sufficient to limit the growth of facultative microorganisms while not inhibiting the growth of anaerobe microorganisms, and oxygen scavenging membrane fragments to create an anaerobic environment, wherein the membrane fragments are derived from a respiratory system of an organism sensitive to azide.

2. (Currently Amended) ~~The medium composition of claim 1,~~ An anaerobic medium composition for the selective growth of anaerobes from a sample that contains at least facultative microorganisms and anaerobes, wherein said medium composition comprises a broth medium, a salt of an azide present in an ~~wherein the~~ amount of ~~the azide ranges~~ from about 0.1 mg/ml to 1.0 mg/ml, in the medium, and oxygen scavenging membrane fragments to create an anaerobic environment, wherein the membrane fragments are derived from a respiratory system of an organism sensitive to azide~~wherein the medium is a broth medium~~.

3. (Currently Amended) The medium composition of claim [[1]]2, wherein the amount of the azide ranges from about 0.01 mg/ml to 1.0 mg/ml in the medium~~, and wherein the medium is an agar medium~~.

4. (Currently Amended) The medium composition of claim [[1]]2, wherein the medium comprises Brain Heart Infusion, Brucella, CDC Anaerobe, Nutrient, Schaedler, Thioglycollate, or Trypticase Soy ~~in broth or agar form~~.

5. (Cancelled).

6. (Cancelled).

7. (Currently Amended) The medium composition of claim [[1]]2, wherein the sample is obtained from

a. patients;

b. economically important animals; or

c. pharmaceutical, or environmental sources.

8. (Currently Amended) A method for the rapid recognition, isolation, or identification of anaerobes from a sample that contains at least facultative microorganisms and anaerobes comprising the following steps:

a. providing a liquid medium composition comprising a nutrient medium and a salt of an azide, wherein the azide is present in an amount sufficient to limit the growth of facultative microorganisms while not limiting the growth of anaerobes, and oxygen scavenging membrane fragments to create an anaerobic environment, wherein the membrane fragments are derived from the respiratory system of an organism sensitive to azide;

b. inoculating the sample into the liquid medium composition;

c. incubating the inoculated liquid medium composition;

d. determining the presence of growth in the inoculated liquid medium composition, with partial growth being indicative that an anaerobe is present; and,

e. sampling the inoculated liquid medium composition ~~containing the azide~~ for further characterization and isolation of the anaerobe organism.

9. (Currently Amended) A device for the transport of a sample that contains anaerobes and facultative microbes to enable the recovery of the anaerobes, wherein the device comprises the self-generating anaerobic medium composition of claim [[1]]2.

10. (Previously Presented) A medium composition which allows for the selective growth of an anaerobe contained in a mixed sample also containing at least a facultative microbe comprising a microbiological nutrient medium containing a hydrogen donating substance, a plurality of oxygen scavenging membrane fragments which contain an electron transport system which reduces oxygen to water in the presence of a hydrogen donor, and an inhibitor of the electron transport system required for cellular respiration, wherein the inhibitor is present in an amount sufficient to terminate the growth of the facultative microbes while not terminating the growth of the anaerobe, and wherein the oxygen scavenging membrane fragments are derived from respiring bacteria.

11. (Previously Presented) The medium composition of claim 10, wherein the hydrogen donating substance comprises an organic substrate.

12. (Previously Presented) The medium composition of claim 10, wherein the hydrogen donating substance comprises lactic acid, succinic acid, alpha-glycerol phosphate, formic acid or malic acid or any of their corresponding salts.

13. (Previously Presented) The medium composition of claim 10, wherein the oxygen scavenging membrane fragments are derived from the cytoplasmic membranes of *Escherichia coli*.

14. (Cancelled).

15. (Cancelled).

16. (Previously Presented) The medium composition of claim 10, wherein the inhibitor of the electron transport system comprises an azide or cyanide.

17. (Previously Presented) The medium composition of claim 10, wherein the inhibitor of the electron transport system comprises a salt of an azide or a cyanide.

18. (Previously Presented) The medium composition of claim 10, wherein the inhibitor of the electron transport system is sodium azide.

19. (Previously Presented) The medium composition of claim 10, wherein the microbiological nutrient medium comprises Brain Heart Infusion, Brucella, CDC Anaerobe, Nutrient, Schaedler, Thioglycollate or Trypticase Soy medium in broth or agar form.

20. (Previously Presented) A medium composition which restricts the growth of facultative microbes but not anaerobic microbes comprising a nutrient medium comprising a hydrogen donating organic substrate, one or more oxygen scavenging membrane fragments derived from the cytoplasmic membranes of bacteria, and an inhibitor of the electron transport system required for aerobic respiration.

21. (Previously Presented) The medium composition of claim 20, wherein the oxygen scavenging membrane fragments are derived from the cytoplasmic membranes of *Escherichia coli*.

22. (Previously Presented) The medium composition of claim 20, wherein the inhibitor of the electron transport system comprises a salt of azide or cyanide.

23. (Previously Presented) The medium composition of claim 20, wherein the inhibitor is sodium azide.

24. (Previously Presented) The medium composition of claim 20, wherein the inhibitor of the electron transport system is present in an amount sufficient to limit the growth of the facultative microbes but not the anaerobic microbes.

25. (Previously Presented) A medium composition which restricts the exponential growth of facultative microbes but not anaerobic microbes comprising a base medium containing a hydrogen donating substrate, oxygen scavenging membrane fragments derived from the cytoplasmic membranes of *Escherichia coli,* and a salt of an azide.

26. (Previously Presented) The medium composition of claim 25, wherein the salt of an azide is present in an amount sufficient to inhibit the exponential growth of the facultative microbes but not the anaerobic microbes.

27. (Cancelled).

28. (Previously Presented) A method for the selective growth of an anaerobe from a sample containing a facultative microbe, said method comprising the steps of:

a. providing a medium composition comprising a nutrient medium containing a hydrogen donating substance, a salt of an azide, and oxygen scavenging membrane fragments which contain an electron transport system which reduces oxygen to water in the presence of a hydrogen donor, wherein the membrane fragments are derived from the respiratory system of an organism normally sensitive to azide;

b. inoculating the medium composition with the sample; and,

c. incubating the medium composition containing the sample.

29. (Previously Presented) A method for the selective growth of an anerobe from a sample containing a facultative microbe, said method comprising the steps of:

a. providing an agar plate comprising a nutrient medium, a salt of an azide, and oxygen scavenging membrane fragments which reduce oxygen to water wherein the membrane fragments are derived from a respiratory system of an organism normally sensitive to azide;

b. providing a liquid broth comprising a nutrient medium and a salt of an azide;

c. inoculating the liquid broth with the sample and thereafter incubating the inoculated broth;

d. inoculating the plated agar medium with the liquid broth containing the sample; and,

e. incubating the plated agar medium inoculated with the liquid broth under anaerobic conditions thereby producing isolated colonies of the anaerobe free of facultative microbe.

30. (Previously Presented) The method of claim 29, further comprising the step of:

f. selecting isolated colonies of the anaerobes for characterization and identification.

31. (Previously Presented) A method for the selective enhancement of an anaerobe from a mixed sample also containing a facultative microorganism, said method comprising the steps of:

a. providing a liquid nutrient medium composition containing a biocatalytic oxygen reducing agent and a salt of an azide in an amount sufficient to limit the growth of facultative microorganisms while not inhibiting the growth of anaerobic microorganisms;

b. providing an agar plate comprising a nutrient medium, a salt of an azide, a biocatalytic oxygen reducing agent, and a hydrogen donating substance;

c. inoculating the liquid medium composition with the mixed sample and thereafter incubating the inoculated broth;

d. inoculating the agar plate with the liquid medium composition containing the mixed sample; and

c. incubating the agar plate containing the mixed sample under anaerobic conditions.

32. (Previously Presented) The method of claim 31, wherein the biocatalytic oxygen reducing agent comprises oxygen scavenging membrane fragments of bacteria normally sensitive to azide.

33. (Previously Presented) The method of claim 31, wherein the biocatalytic oxygen reducing agent comprises oxygen scavenging membrane fragments of mitochondrial organelles.

34. (Previously Presented) The method of claim 32, wherein the bacteria is *Escherichia coli.*

35. (Previously Presented) The method of claim 31, wherein the salt of an azide is sodium azide.

36. (Cancelled).